

REMARKS

In response to the Office Action dated March 19, 2010, Applicants submit the following Remarks in response. Claims 8 and 16 are withdrawn. In view of the foregoing amendments and the following remarks, Applicants respectfully submit that all pending claims are in condition for allowance.

Reconsideration and withdrawal of the following rejections are solicited in view of the remarks below:

**Claims 1, 4, 6, 9 & 12 rejected under 35 U.S.C. 102(b) as being anticipated by Watson et al. ("Synthesis of a novel magnetic photocatalyst by direct deposition of nanosized TiO<sub>2</sub> crystals onto a magnetic core", Journal of Photochemistry and Photobiology A: Chemistry, Vol. 148, 303-313, 2005.5.31).**

**Claim 3, 5, 11 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al. ("Synthesis of a novel magnetic photocatalyst by direct deposition of nanosized TiO<sub>2</sub> crystals onto a magnetic core", Journal of Photochemistry and Photobiology A: Chemistry, Vol. 148, 303-313, 2005.5.31)**

**Claim 7, 14 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson et al. ("Synthesis of a novel magnetic photocatalyst by direct deposition of nanosized TiO<sub>2</sub> crystals onto a magnetic core", Journal of Photochemistry and Photobiology A: Chemistry, Vol. 148, 303-313, 2005.5.31) and further in view of Ueta et al. 2004/0126609.**

As to the feature recited in claims 1 and 9: "satisfying a composition range where oxygen is less than oxygen of a stoichiometry composition of a compound constituted of an element and

oxygen, that constitute the lower film", "a compound" refers to a compound constituted of an element and oxygen in a chemical formula for the lower film.

Watson et al. discloses a soft magnetic material of  $\text{Fe}_3\text{O}_4/\text{SiO}_2/\text{TiO}_2$  in which  $\text{Fe}_3\text{O}_4$ ,  $\text{SiO}_2$  and  $\text{TiO}_2$  are arranged in this order from the innermost material ( $\text{Fe}_3\text{O}_4$  is the inner most material). In the case, for example, where Watson et al. is applied to the claimed subject matter, "a compound" refers to a compound constituted of Si and O, and  $\text{SiO}_2$  (for the lower film) contains oxygen in accordance with the stoichiometry composition. In contrast, an oxide of a nonferrous metal for the lower film of the present claimed subject matter satisfies a composition range in which oxygen is less than that of the stoichiometry composition, and is therefore represented by  $\text{SiO}_x$  (x is smaller than 2). The present specification, at page 13, lines 23 to 26 describes some examples of such an oxide of a nonferrous metal satisfying a composition range where oxygen is less than that of the stoichiometry composition, such as amorphous nonferrous metals (Al, Cr, Si)-oxygen (O), amorphous nonferrous metals (Al, Cr, Si)-phosphorus (P)-oxygen (O), and amorphous nonferrous metals (Al, Cr, Si)-boron (B)-oxygen (O).

In the Office Action, the Examiner states that Watson et al. discloses that "[t]he lower film ( $\text{SiO}_2$ ) satisfies a composition range that oxygen is less than oxygen of a stoichiometric composition of a compound ( $\text{Fe}_2\text{O}_3$ ) and constitutes an element and oxygen as the lower film ( $\text{SiO}_2$ )" (what is actually disclosed in Watson et al. is not  $\text{Fe}_2\text{O}_3$  but  $\text{Fe}_3\text{O}_4$ ). In Watson et al., however, what corresponds to "a compound" of the present claimed subject matter is not  $\text{Fe}_2\text{O}_3$  but rather  $\text{SiO}_2$ , as explained above. Namely, the Examiner appears to misunderstand the structure of the claimed subject matter.  $\text{SiO}_2$  in Watson et al. contains oxygen in accordance with the stoichiometry composition, and therefore, the subject matter of claims 1 and 9 and the invention disclosed in Watson et al. are different in terms of the structure. Since Watson et al.

discloses an oxide of the nonferrous metal constituting the lower film containing oxygen of the amount in accordance with the stoichiometry composition, the lower film of Watson et al. cannot capture oxygen diffusing from the upper film toward metal magnetic particles.

The above argued difference between the claimed soft magnetic material and the invention of Watson undermine the factual determination that Watson discloses the soft magnetic material identically corresponding to that claimed in independent claims 1 and 9. *Minnesota Mining & Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 976 F.2d 1559, 24 USPQ2d 1321 (Fed. Cir. 1992); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 230 U.S.P.Q. 86 (Fed. Cir. 1986). Based on the forgoing, it is submitted that Watson et al. does not anticipate amended claims 1 and 9, nor any claim dependent thereon. The dependent claims are allowable for at least the same reasons as claims 1 and 9.

Moreover, Ueta fails to remedy the above argued deficiencies of Watson et al. Applicants, therefore, submit that the imposed rejections under 35 U.S.C. §§ 102, 103 are not factually viable and, hence, solicit withdrawal thereof. The dependent claims are allowable for at least the same reasons as claims 1 and 9. Accordingly, in view of the foregoing, withdrawal of the foregoing rejections is respectfully requested.

In view of the above amendments and remarks, Applicants submit that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in black ink, reading "Brian K. Seidleck". The signature is written in a cursive, flowing style.

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